

## Internship opportunity at Roche

[https://careers.roche.com/global/en/job/ROCHGLOBAL202303106317EXTERNALENGLOBAL/Internship-Organoid-Genome-Editing/?utm\\_source=twitter&utm\\_campaign=job-share&utm\\_medium=social-share](https://careers.roche.com/global/en/job/ROCHGLOBAL202303106317EXTERNALENGLOBAL/Internship-Organoid-Genome-Editing/?utm_source=twitter&utm_campaign=job-share&utm_medium=social-share)

### The position

**You will join the Roche Institute of Translational Bioengineering (ITB), an organisation within pRED whose goal is to harness and advance the use of human model systems in drug discovery and development, as well as personalised medicine. Our interdisciplinary research bridges academic and pharmaceutical research, connecting biologists, engineers, and data scientists.**

We partner and collaborate with leading scientific institutions worldwide to tackle grand challenges by assembling, funding, and leading interdisciplinary teams of experts to work on highly ambitious and complex scientific questions.

The development of CRISPR-mediated genome engineering has greatly expanded the scope and ease of generating isogenic disease models. Yet, implementation of these tools have proven to be technically challenging in adult stem cell-derived organoids. You will join the organoid genetic engineering team, focused on implementing and developing next-generation CRISPR tools in human model systems to study broad aspects of epithelial biology.

The internship position will involve the development and application of state-of-the-art CRISPR techniques that allow precise genome editing or the delivery of large cargos into human organoid systems. The student will employ these techniques to generate models of complex genetic changes in physiologically relevant culture systems. This project is a unique opportunity to work at the interface of industry and academia on cutting edge organoid research.

### Your impact

- Implementation of state-of-the-art genome editing technologies in physiologically relevant human model systems
- Develop adult stem cell derived organoid culture protocols to optimize the generation of genetically engineered lines
- Develop genotyping strategies to assess editing outcomes
- Assess phenotypes of successfully engineered organoid models
- Presentation of results within a multidisciplinary environment

### Your profile

You are a highly motivated and curious master student who thrives in an inclusive environment that recognizes individual contributions and encourages you to take

charge of your own development. You have the ambition to work in a world-leading research environment with the mission to push the boundaries of organoid research.

Specifically:

- You are a master student enrolled in a biology or life science program with an interest in genetic engineering and organoid technology
- You are available for a 9 to 12 month internship.
- You are creative, curious and highly motivated
- You have a strong work ethic and excellent communication skills
- You are fluent in English

Desired additional skills:

- Prior experience with organoid culture, molecular biology and genetic engineering techniques is a bonus
- Experience in organoid culture
- Experience with flow cytometry, cell sorting, genomic PCR, confocal microscopy, and electroporation
- Experience with genetic design (genetic constructs, genome editing strategies, genotyping primer sets)
- Programming experience (Python or R)

## Who we are

At Roche, more than 100,000 people across 100 countries are pushing back the frontiers of healthcare. Working together, we've become one of the world's leading research-focused healthcare groups. Our success is built on innovation, curiosity and diversity.

Basel is the headquarters of the Roche Group and one of its most important centres of pharmaceutical research. Over 10,700 employees from over 100 countries come together at our Basel/Kaiseraugst site, which is one of Roche's largest sites. [Read more.](#)

Besides extensive development and training opportunities, we offer flexible working options, 18 weeks of maternity leave and 10 weeks of gender independent partnership leave. Our employees also benefit from multiple services on site such as child-care facilities, medical services, restaurants and cafeterias, as well as various employee events.

We believe in the power of diversity and inclusion, and strive to identify and create opportunities that enable all people to bring their unique selves to Roche.